

Weather Briefing, 20060118, 10 AM

It is quite blustery this morning, with sustained easterlies of 21 knots, and gusts to 32 knots reported at Juan Santamaria. This is due to a cold front passage over the Gulf of Mexico. Yesterday's strong southerly winds ahead of the cold front weakened the trade winds upstream of us substantially. With the passage of the cold front, these southerly winds have been replaced by strong northerlies and a high pressure system. This has intensified the trade winds over the Caribbean (and shifted their direction to northeasterly from easterly), producing today's blustery conditions. The models have captured this quite well over the past few days. The GFS has been consistent predicting this phenomenon. The finer scale models (such as the Air Force MM5 and CIGEFI's MM5) have also captured the transition from weak winds yesterday to strong winds today. The Air Force model forecasted 18 knot sustained winds today, and CIGEFI 20 knots.

The synoptic situation changes tomorrow (January 19). The high pressure system over the Gulf of Mexico will move east-north-eastward, leading to southerlies (instead of northerlies) over the Gulf of Mexico. The direction of the trade winds over the western Caribbean shifts to more easterly (instead of northeasterly). We expect more moderate winds at the airport tomorrow because of this change in the synoptic situation. The CIGEFI and Air Force MM5 models also indicate a reduction in the winds.

Conditions on January 20 should be similar to tomorrow at the airport, with winds close to seasonal normals.